

AMENDMENTS TO THE CLAIMS

In the claims:

This Listing of Claims replaces all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) A peptide comprising SEQ. ID NO.:1 derived from human transcription factor SIM2 amino acid sequence beginning at the 558th marker of SEQ. ID No.:1 human transcription factor SIM2 and ending at the 566th marker of human transcription factor SIM2, or its active fragment, for transducing wherein the peptide is capable of transducing a biologically active, functional or/and regulatory molecule into prokaryotic cells or eukaryotic cells.
2. (Canceled)
3. (Currently Amended) The peptide ~~comprising amino acid sequence of SEQ. ID No.:1 or its active fragment~~ of claim 1, wherein the biologically active functional regulatory molecule is any one of ~~selected from the group consisting of a protein, a DNA fragment, an RNA fragment, a carbohydrate, a lipid and or a chemical compound.~~
4. (Currently Amended) The peptide ~~comprising amino acid sequence of SEQ. ID No.:1 or its active fragment~~ of claim 1, wherein the peptide ~~or its active fragment~~ is transduced into the cells of prokaryotes or eukaryotes ~~through and administered *in vivo* through~~ administration routes comprising intramuscular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal and inhaling routes.
5. (Currently Amended) A recombinant expression vector comprising: a DNA sequence DNAs encoding a peptide comprising SEQ. ID NO.:1 derived from human transcription factor SIM2 beginning at the 558th marker of human transcription factor SIM2 and ending at the 566th marker of human transcription factor SIM2 ~~the peptide or its active fragment of claim 1, DNAs encoding one or more homologous or heterologous protein as a biologically active functional regulatory molecule and operably linked expression regulatory sequence.~~

6-29. (Canceled)

30. (Currently Amended) A method of transducing ~~[[the]]~~ a-peptide ~~or its active fragment of claim 3~~ into a prokaryotic or eukaryotic cell comprising:

preparing a peptide construct comprising SEQ. ID NO.:1 derived from human transcription factor SIM2 beginning at the 558th marker of human transcription factor SIM2 and ending at the 566th marker of human transcription factor SIM2, wherein the peptide includes a biologically active, functional or/and regulatory molecule; and

delivering the peptide construct *in vivo* to a subject through administration routes comprising intramascular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal and inhalation routes.

31-37. (Canceled)